

भारत सरकार GOVERNMENT OF INDIA खान मंत्रालय MINISTRY OF MINES भारतीय खान ब्यूरो INDIAN BUREAU OF MINES क्षेत्रीय खान नियंत्रक के कार्यालय OFFICE OF THE REGIONAL CONTROLLER OF MINES



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MPM/FM/12-ORI/BHU/2017-18

Date: 03.10.2017

To

Mala Roy, Authorized Signatory, M/s Mala Roy & Others, 192 -D, S.C. Bose Road, Kolkata-700040

Sub: Approval of modification of Review of Mining Plan of Jalahuri Manganese Mine along with Progressive Mine Closure Plan (PMCP), over an area of 182.109 ha in Keonjhar district of Odisha State, submitted by M/s Mala Roy & Others under Rule 17 of MCDR, 1988.

Ref: i) Your letter No. Nil dated 11.09.2017.

ii) This office letter of even no. dated 13.07.2017.

iii) This office letter of even no. dated 13.07.2017 addressed to the Director of Mines. Govt. of Odisha, copy endorsed to you.

Sir,

This has reference to the letter cited above on the subject. The draft of modification of Review of Mining Plan along with Progressive Mine Closure Plan (PMCP) has been examined in this office based on site inspection carried out on 19.09.2017 by Shri G C Sethi, Deputy Controller of Mines & Shri Dilip Jain, Junior Mining Geologist. The deficiencies observed are enclosed herewith as Annexure

You are advised to carry out the necessary modifications in the draft modification of Review of Mining Plan in the light of the contents vide Annexure 1 and submit three (3) firm bound and two (2) soft copies of the document text in CD in a single MS Word file (the drawing/plates should be submitted in Auto CAD compatible format or JPG format in resolution of 100x100 pixels on same CD) with financial assurance under Rule 27 of MCDR 2017 of the Modification of Review of Mining Plan within 15 (Fifteen) days from the date of issue of this letter, for further necessary action. If the total page of annexures exceeds 50 (Fifty) then it should be submitted as separate volume. But reference of these annexures must appear in the modification of Review of Mining Plan document. The plates are also to be submitted in separate volume.

The para-wise clarifications and the manner in which the deficiencies are attended should invariably be given while forwarding the modified copies of the modification of Review of Mining Plan. It may be noted that no extension of time in this regard will be entertained and the modification of Review of Mining Plan will be considered for rejection if not submitted within above due date. It may also be noted that if the deficiencies are not attended completely, the submission would be liable for rejection without further correspondence. faithfully,

क्षेत्रीय खान नियंत्रक / Regional controller of Mines

SCRUTINY COMMENTS ON EXAMINATION OF MODIFICATION OF REVIEW OF MINING PLAN WITH PROGESSIVE MINE CLOSURE PLAN FOR JALAHURI IRON & MANGANESE MINE OF M/S MALA ROY & OTHERS, OVER AN EXTENT OF 182.109 HECTARES OR 450.00 ACRES, LOCATED IN VILLAGES JALAHURI, KHANDBANDH, BANSPANI & BAITARANI R.F., UNDER JODA P.S OF KEONJHAR DISTRICT OF ODISHA STATE, SUBMITTED UNDER RULE 17(3) OF MCR, 2016.

- On examination of the front cover, full postal address of the company & the registration number allotted by IBM, under Rule 45 of MCDR, 1988 is missing, which should be furnished. Besides, the validity status of the mining lease also not given.
- 2. On examination of the contents & chapters of the mining plan, it is found that, the document has not been prepared as per the universal format for mining plan including progressive mine closure plan. The chapter 4.0 has been mentioned to be for Stacking of mineral rejects and disposal of waste instead the same should be mentioned as Stacking of Mineral Rejects/Sub-grade Material and Disposal of Waste.
- 3. In the consent letter/undertaking/certificate from the applicant, the consent has been given for preparation of modification of mining plan but on the front cover, the document has been submitted for modification of Review of Mining Plan. Besides, Shri Chandrabhanu Das has been signed the document in his capacity as consulting geologist instead of a Qualified Person, thereby necessary incorporations/corrections may be made at all the places of the document.
- 4. The certificate from the qualified person is given under MCR, 2015 instead the same should be furnished under MCDR, 2017 and necessary corrections may be made in the certificates accordingly. (5) Smt. Mala Roy has been signed the document in her capacity as authorised signatory but a board resolution nominating Smt. Roy to sign the mining plan document has not been submitted.
- 5. Few pages of the renewed lease deed enclosed as annexure-I is not legible, thereby the same should be replaced by fresh & legible pages. Besides, the lease was renewed for 20 years from 16.05.1993 for 20 years, which expired on 15.05.2013 but the lease extension letter from the state authorities has not been enclosed.
- 6. The copy of the list of the Board of directors for other companies has been enclosed as annexure-III, instead the same for M/s Mala Roy & Others should be submitted indicating the phone/fax/e-mail ID of all the Board of Directors for ease in monitoring.
- 7. The copy of the ID & address proof of the applicant enclosed as annexure-IV is not legible; thereby, fresh legible copies for the same should be submitted.
- 8. The copy of the FDP clearance enclosed as annexure-VII is not clearly legible and the same should be replaced by a fresh copy for more informative.
- The copy of the borehole test report from SGS has been enclosed as annexure-X but the valid NABL accreditation certificate in favour of the aforesaid laboratory has not been enclosed.
- 10. The chemical analysis report of iron ore & manganese samples from Mitra S.K Private Ltd has been enclosed as annexure-XI but the analysis reports are very old, analysed during June & July 2013, which is not acceptable, instead fresh analysis report should be obtained either from a NABL accredited laboratory or from a Govt. laboratory & enclose along with the document for more informative.
- 11. The locations of (in UTM) of all the quarries to be given in the table presented on page number 15.

 Further, at places the top and bottom mRL for the quarries as mentioned in the table are also not matching with the mRL shown on the surface plan. Verify and rectify.
- 12.Page 16: The details of the drilled BH to be given in the tabulated form comprising of BH id, Core/non-core, diameter, inclination, Location (UTM), Collar level, depth, mineralized/non-mineralized etc. Further, the details of the of samples analysis indicating type of sample (surface/sub-surface from pits/trenches/borehole etc) to be given.
- 13.It is mentioned that the number of the samples have been collected form the float ore zone, however, details like number of samples drawn, location of sampling along with the analysis of same has not

given in the text. Same to be furnished in the tabulated form and needs to be depicted on the

- 14.Para I: As per rule 21(4) of the MCDR, 2017 entire potentially mineralized zone to be explored under G1 level of exploration, however, it is observed that the proposed exploration programme is inadequate to explore entire potentially mineralized zone under G1 level of the exploration. Hence, proposal of the exploration to be given in accordance to the Minerals (Evidence of Mineral Contents) Rules, 2015 to explore entire mineralized zone under G1 level of exploration. Further, details of exploration to be given accordance to the land schedule i.e. forest/non-forest/diverted forest etc.
- 15. From geological sections and bore hole log it is observed that few BH have been closed in the mineralized zone only, hence proposal of exploration upto the end of mineralization to be given. Further, the details like BH id, location (UTM), depth, inclination, Grid interval, BH type (Core/non-core) to be given in tabulated form for the proposed exploratory BH.
- 16. Justification to be given to kept reserve under 111 category, even after the mine is under suspension for want of statutory clearances.
- 17.It is observed that resource have been estimated for three different blocks on the basis of the forest clearances/tree felling permission. All the blocks to be marked property on the plan and section for better understanding.
- 18. Many tables have been furnished in text without any proper heading, which creates confusion to understand the data. Verify and rectify.
- 19. Documentary evidence in respect of the expenditure occurs for the exploration to be enclosed.
- 20. The details like potentially mineralized area and its extent (coordinate in WGS 84), potentially mineralized area explored (in forest and non-forest area, Govt. land, Pvt. land etc.), remaining area, proposal of exploration to explore remaining potentially mineralized area to be given with justification of adequacy.
- 21.It is observed that the resource have not been estimated as per the Minerals (Evidence of Mineral Contents) Rules, 2015. In view of the mentioned rules resource estimation needs to be revised as a whole. On verification of the fee of the BH data on geological section, it is observed that the correlation of the different litho has not carried out properly. Hence, considering all the available information, sections to be recast.
- 22.A summary of lease area explored as per UNFC norms indicating G1, G2, etc. should be given in the following format and area explored under G1, G2 etc. to mark on relevant plan:

	Lease area explored as Fer UNFC norms (in Ha) as on dt. Total Lease area = $A+B+C+D+E$					Remarks/Comments including reasons for
	A	В	С	D	Е	
	Area as per level of exploration					
No. of BH Drilled						
No. of BH considered for Resource Estimation.						
Meterage Drilled						1 2 2
Grid Interval						
Scale of Mapping						

- 23. The copies of base line data for Jalahuri iron & manganese mine has been enclosed as annexure-XII but the reports are very old and not acceptable in its present form.
- 24. The consent order from State Pollution Control Board, Odisha has not been enclosed; thereby a valid consent for the same should be submitted.

- 25. Air, surface water, ground water, noise & vibration analysis report has not been enclosed as annexure to the document, which should be submitted for all four seasons of the year either from NABL accredited laboratory or from a Govt. Laboratory.
- 26. The copy of the explosive procurement license issued by the competent authority in favour of M/s Mala Roy & Others has not been enclosed. Besides, a copy of the blasters license issued by the competent authority for carrying out blasting operations may also be submitted.
- 27. A copy of the valid Bank Guarantee dated 18.07.2013 valid upto 31.03.2018 for Rs. 2777375/-enclosed as annexure-XIII but the differential amount of bank guarantee at the enhanced rate of Rs.3,00,000/- has not been submitted.
- 28. No photographs in support of the quarry /dump /stack /reclamation & rehabilitation /afforestation etc. have been enclosed along with the document, which should be submitted for more informative.
- 29. In item No. 3 of the profile of the lease area, the validity status of 2nd renewal of the mining lease mentioned appears to be not correct, which should be checked and corrected. (Page No. 1)
- 30. In item No. 5 of the profile of the lease area, the approval status of the mining plan/scheme of mining in different occasions have been furnished but the copies of such approval letters has not been enclosed. Besides, the validity status of the mining plan approved on 12.08.2013 should be checked and the period of proposed modification period may also be revised accordingly if required. (Page No. 2)
- 31.In item No. 8 of the profile of lease area, the status of consent to operate from State Pollution Control Board has been furnished but the supporting paper in support of such consent to operate has not been enclosed. (Page No.2)
- 32. The postal PIN code address of the mine is given in the para under reference code is missing, which should be furnished for more informative. [Para 1.0(a)]
- 33.(i) The validity status of the 2nd renewal of mining lease granted on 11.06.1999 should be checked & corrected as the same is found not in order. (ii) The lessee has submitted the 3rd renewal application on 10.05.2012 but the copy of the same has not been enclosed. [Para 2.0(a)(ii)]
- 34. The proposed & actual achievement status of the boreholes has not been furnished in separate tables, which should done. [Para 3.3(i)(a)]
- 35. The actual development status of the quarry nos. 6,7 & 9 during each year of the last approved mining plan period from 2013-14 to 2016-17 has not been given, which should be furnished indicating the reasons for deviation if any for more informative. [Para 3.3(i)(a)(ii)]
- 36. The copies of the violation letter and compliance status submitted by the party have not been enclosed as per the requirement of the para under reference, which should be submitted for more informative. (Para 3.4)
- 37. The suspension status of the mining operations by DFO & DDM has been furnished but the copies of such suspension order has not been enclosed, which should be submitted. (Para 3.5)
- 38. The submission status of the modification document under rule 17(3) of MCR, 2016 with reference to the validity of the mining plan approved on the last occasion should be furnished and the para may be revised accordingly as the environmental clearance has been accorded only for 6,00,000 tonnes of iron ore production. (Para 3.6)
- 39.Existing method of mining should be furnished in detail, including the existing status of the quarries/pits with dimensions, dumps with size/capacity, reclamation indicating extent of area in ha., rehabilitation & afforestation with extent of area in ha. etc. for more informative. Besides, the location co-ordinates of the existing quarries, dumps, reclamation & rehabilitation may also be furnished. Moreover, nothing has been discussed about the proposed method of mining and the same should also be furnished by giving proposed bench formation status both in overburden & in ore zone, dumping, reclamation & rehabilitation etc. for all the pits/quarries proposed for excavation. If the existing quarries/pits are proposed to be developed /extended, the same may also be furnished. In the light of the above; the entire para may be revised. [Para 2.0(A)(a)]

- 40. The excavation planning for the year 2017-18 has been furnished but the achievements in production, waste handing for the period from 2013-14 to 2016-17 should also be furnished and the para may be revised accordingly. [Para 2.0(A)(b)]
- 41.In the table furnished in para 2.0(A)(b)(i), the name of the pit/quarry has not been mentioned. Besides, the generation status of mineral rejects & Ore: OB ratio also not furnished, thereby the table may be revised accordingly.
- 42. The bulk density of the iron ore is considered as 3.5t/m3 & 2.5t/m3 respectively and the recovery is considered as 100% but the bulk density test report and recovery test report from Govt./NABL accredited laboratory has not been enclosed, which should be submitted for ease in monitoring. [Para 2.0(A)(b)(i)]
- 43. The breakup of Saleable and sub-grade ore has been furnished in tabular form but the percentage recovery of the same has not been given, which should be furnished for ease in monitoring. [Page No. 38]
- 44. The location co-ordinates of the proposed workings should be furnished indicating the direction of advancement of quarry faces. Besides, the status of waste dump & the location co-ordinates proposed for the same with size/capacity and direction of advancement may also be discussed. Moreover, the requirements of reclamation & rehabilitation may also be furnished. In the light of the above, the information furnished in para 2.0(e) may also be revised. [Para 2.0(d)]
- 45.In the table furnished in the page under reference, it is found that (i) In 3rd column, only the bottom bench RL has been furnished, instead both too & bottom RL is required be mentioned. Besides, no information about the height & width of the individual benches has been given. (ii) In column No. 9, the total volume of excavated ore zone has been converted into tonnage, which indicates that, the entire loosened material from the ore zone is considered as production. No data in support of percentage recovery of salable ore, sub-grade & mineral rejects has been furnished, thereby the recovery test report from NABL accredited laboratory or from Gov. Laboratory should be furnished. (iii) The grades of iron ore, sub-grade material and the waste may also be given supported by authenticated chemical analysis report. Accordingly, corresponding incorporations /modifications may also be made in connected paras in the text & relevant plates. [Page No. 40(a)]
- 46.Ultimate size of a single pit/quarry has been furnished in tabular form, whereas, there are two nos. of pits/quarries are proposed under excavation planning, thereby the ultimate dimension of both the pits/quarries should be furnished. [Para 2.0(f), page No. 43]
- 47.Under the heading, waste management, the extent of dumping area as well as location co-ordinates of such dump is missing, which should be furnished. Besides, the extent of proposed backfilling area & the location co-ordinates for the same may also be furnished. (Page No. 44)
- 48. The existing top & bottom RLs of the mine working is missing, which should be furnished co-relating the maximum and minimum depth of the ground water table for ease in monitoring. [Para 3.0(a)]
- 49. The quality of water encountered in the area has not been mentioned and the same may also be furnished. [Para 3.0(c)]
- 50. During the year 2017-18, only 2, 90,500 tonnes of sub-grade materials are proposed to be generated but the calculations in support of such generation has not been furnished. [Para 4.0(d)]
- 51.All the plan & sections submitted along with the modification of Review of mining plan should be certified by the Qualified Person indicating that, the plans and sections are prepared based on the lease map authenticated by the State Govt. of Odisha and found to be correct.
- 52.Plate-I (Key Plan): Most of the features given for index are not clearly legible, thereby the same should be marked clearly both in index as well as on the plan portion of the plate. Besides, the 25cm long scale for the plate also not drawn.
- 53.Plate No-2A (DGPS Map): Signature of ORSAC authority is missing on the plan. Besides, the extent of lease area also not furnished. Moreover, the plate has not been authenticated by the competent authority of State Govt. of Odisha, thereby not accept in its present form.

- J4.Plate-III (Surface Plan): (i) Few existing quarries marked on the plan have not been named/numbered for their identification. (ii) Few small scattered existing dumps are also not named /numbered/depicted on the plan as per the index. (iii) The index reference given for existing mineral Besides, the index reference given for power lines, magazine, retaining wall, garland drain, check dam, qualified person is missing on this plate. Surveyor's signature also missing, which should be signed by a competent surveyor. (v) There are two notations for existing bore holes have been given in the index submitted along with the document may also be revised. (vi) The pillar co-ordinates of all the lease boundary pillars have not been furnished. (vii) Atleast three permanent ground control points beyond control points should be furnished. The ground control points need to be linked with boundary pillars.
- 55. Plate IV and IV A (Geological plan and Section): Contour line has not shown on the plan, same needs to show for better correlation of plan and section. Geological x-section have been prepared in two different direction, same needs to be justified. All the proposed BH needs to show along with the tentative depth on the geological section in dotted line. Direction of the sections to be depicted on geological section along which the sections have been drawn.
- 56.Plate-V (Development, dump plan & Sections): (i) There are two nos. of quarries such as Quarry-7 & 9 are proposed to be excavated but the production proposal given in the text can be achieved from a single quarry, thereby instead of proposing excavation planning in two locations, a single quarry should be proposed. (ii) The excavation, dumping & stacking etc. has not been clearly depicted on the plan. Besides, the development sections are not named /numbered. (iii) The lithology depicted on the development sections are also not matching with that of the plan. In the light of the above, all other relevant plans & sections submitted along with the document may also be revised accordingly.
- **57.Plate-VI** (Environment Plan): All the existing features available within 500m radius of the lease area has not been marked, which should be depicted and the plate may be revised accordingly.
- 58.Plate-VII (Reclamation Plan): Many of the proposed features given in the index is not matching with the plan portion of the plate, thereby the plate should be revised in such a way that, the features given in the index will match with the plan portion of the plate. Accordingly, the plates submitted for progressive mine closure plan may also be revised.

(DILIP JAIN)

Chilon 2017

Junior Mining Geologist

Deputy Controller of Mines